

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/811,261	03/16/2001	Martin Bleck	4492P1003US	9941	
75	590 05/22/2002				
Robert B. Polit, Polit & Associates LLC Suite 200 3333 Warrenville Road			EXAMINER		
			LEADER, WILLIAM T		
Lisle, IL 6053			ART UNIT	PAPER NUMBER	
			1741	5	
			DATE MAILED: 05/22/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

ME
Art Unit 닉)
ndence address
OM THE
ly filed after SIX (6) MONTHS
days will be considered timely. his communication . IED (35 U.S.C. § 133).
rits is closed in
in the application.
n from consideration.
to. restriction or election
estriction of election
O-413
nt Application, PTO-152

		.,		V11-
	Application No.	Applicant(6 '	•
Office Action Summary	69/811,261	Dieci		
	Examiner	Leader	Group Art Unit	
—The MAILING DATE of this communication appears	s on the cover she	et beneath th	e correspondence ad	ddress
Period for Response		7		
A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SE MAILING DATE OF THIS COMMUNICATION.	ET TO EXPIRE	мо	NTH(S) FROM THE	
 Extensions of time may be available under the provisions of 37 CFR 1.7 from the mailing date of this communication. If the period for response specified above is less than thirty (30) days, at lift NO period for response is specified above, such period shall, by defaulting to respond within the set or extended period for response will, be 	a response within the study, expire SIX (6) MON	atutory minimum	of thirty (30) days will be a ailing date of this commun	considered timely.
Status				
☐ Responsive to communication(s) filed on				·
☐ This action is FINAL.				
☐ Since this application is in condition for allowance except for accordance with the practice under <i>Ex parte Quayle</i> , 1935	•		s to the merits is clo	sed in
Disposition of Claims				
Claim(s)		is/a	are pending in the app	lication.
Of the above claim(s)		is/a	are withdrawn from co	nsideration.
□ Claim(s)		is/a	are allowed.	
		is/a	are rejected.	
☐ Claim(s)		is/a	are objected to.	
☐ Claim(s)		. •		
Application Papers		req	quirement.	
☐ See the attached Notice of Draftsperson's Patent Drawing	Review, PTO-948.			
☐ The proposed drawing correction, filed on	is 🔲 approv	ed 🗌 disappr	oved.	
☐ The drawing(s) filed on is/are objected	ed to by the Examin	er.		
☐ The specification is objected to by the Examiner.				
☐ The oath or declaration is objected to by the Examiner.		•		
Pri rity under 35 U.S.C. § 119 (a)-(d)			•	
 Acknowledgment is made of a claim for foreign priority und All Some* None of the CERTIFIED copies of the received. 	_		·	
☐ received in Application No. (Series Code/Serial Number				
☐ received in this national stage application from the Inter	•	•	•	
*Certified copies not received:			•	
Attachm nt(s)	(دوا ایلا این			
Information Disclosure Statement(s), PTO-1449, Paper No	(s). 4 (3/16/47)	☐ Interview S	ummary, PTO-413	
■ Notice of References Cited, PTO-892		☐ Notice of In	formal Patent Applicat	•
□ Notice of Draftsperson's Patent Drawing Review, PTO-948		☐ Other		
Office	Acti n Summary			

gamer & the second of the seco

U. S. Patent and Trademark Office PTO-326 (Rev. 3-97)

Part of Paper No. 5

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fatheree (5,013,015) or Waller et al (3,948,502) in view of The American Heritage Dictionary.

The Fatheree patent is directed to a swing clamp for clamping workpieces to a fixture. As indicated at column 1, lines 17-18, swing clamps are used in various manufacturing operations, particularly machining (column 1, lines 17-18). The

clamp includes a finger assembly with arm or finger 43 which extends radially outward from mandrel 35. The swing clamp also includes a finger actuator for reciprocating the finger between engaged and disengaged positions. The actuator includes cam sleeve 27 with cam slot 29. A cam follower 37 extends outward from mandrel 35. When the mandrel is moved upward or downward, the cam follower 37 and cam slot 29 force the mandrel to rotate about 90 degrees between the upper and lower positions. Thus, the assembly of Fatheree moves both axially and rotationally about a longitudinal axis.

The Waller et al patent is similarly directed to a swing clamp for holding a workpiece to a support. The clamp includes finger 17 and an actuator assembly including piston 19 for moving the finger between engaged and disengaged positions. Movement includes axial and rotational motion about a longitudinal axis.

Instant claim 1 recites at least one electrode forming a part of the finger assembly and having an electrode contact for contacting a surface of the workpiece. Fatheree and Waller et al are silent as to the material from which the swing clamps are made. However, the disclosed use of holding workpieces during various manufacturing operations such as machining would suggest to one of ordinary skill in the art that the clamp should be made of a strong material capable of withstanding the forces imposed by machining. The American Heritage Dictionary

Serial Number: 09/811,261

Art Unit: 1741

defines "metal" as "any of a category of electropositive elements that are usually whitish, lustrous, and in the transition metals, typically ductile and malleable with high tensile strength". The prior art of record is indicative of the level of skill of one of ordinary skill in the art. It would have been obvious at the time the invention was made to have fabricated the finger clamp assemblies of Fatheree and Waller et al from metal components because the desirable properties of ductility and high tensile strength would have been obtained. Such a metal finger assembly would have been capable of serving as an electrode.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yee et al (5,078,852) in view of Fatheree (5,013,015) or Waller et al (3,948,502).

Yee discloses apparatus for electroplating on a semiconductor wafer. The front surface of the wafer is contacted by electrode fingers 16 which provide both the mechanical force that holds the wafer to the work support and the electrical connection that supplies electroplating current to the wafer (column 4, lines 11-14). The fingers are movable between and engaged and disengaged positions.

Claim 1 differs from Yee by reciting both axial and rotational movement about a longitudinal axis. Fatheree and Waller et al are taken as above. It would have been obvious at the time the invention was made to have utilized swing

clamps such as those disclosed by Fatheree and Waller et al to hold the workpiece of Yee because the workpiece would have been securely attached to the support and rotation of the fingers as they were disengaged would have positioned them out of the way for easy insertion and removal of the workpiece.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yee et al (5,078,852) in view of Fatheree (5,013,015) or Waller et al (3,948,502) as applied to claims 1 and 2 above, and further in view of Cancelleri et al (4,192,729).

Claims 3-5 additionally differ from Yee et al by reciting a sheath covering at least a portion of the finger assembly. The Cancelleri et al patent is directed to apparatus for electrolytically treating an integrated circuit chip. Electrode 36 is positioned against the surface of wafer 10 by spring 42. Electrode 36 is surrounded by a protective sleeve or sheath 27. An O-ring is provided at the end of the sleeve which contacts the wafer to provide a seal and prevent entry of electrolyte. See column 4, lines 3-11. The cross hatching of the protective sleeve shown in figure 3 is the same as that of insulating insert 38 and suggest that the sleeve should be made of an insulating material. It would have been obvious at the time the invention was made to have provided contact fingers in apparatus such as that of Yee with a protective sheath which was capable of forming a seal with the surface of the workpiece because penetration of electrolyte would have been prevented as

Serial Number: 09/811,261

Art Unit: 1741

taught by Cancelleri et al.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 5,980,760 in view of Fatheree (5,013,015) or Waller et al (3,948,502).

Claim 1 of 5,908,760 recites a workpiece holder comprising a workpiece support, at least one finger assembly including at least one electrode having an electrode contact, and at least one finger actuator. The finger actuator has means for moving the finger assembly in an axial movement toward and from the workpiece and means to rotate the at least one finger assembly in a rotational movement. Instant claim 1 differs by reciting that the axial movement is along a longitudinal axis and the rotational movement is about the same longitudinal axis.

Fatheree and Waller et al are taken as above and show that swing clamps in which axial and rotational movement are about the same axis are well-known. It would have been obvious at the time the invention was made to have fabricated the clamp of 5,908,760 so that axial and rotational movement was about the same axis because such clamps are compact and mechanically efficient as shown by Fatheree and Waller et al.

Claims 1-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,274,013. Although the conflicting claims are not identical, they are not patentably distinct from each other because instant claims 1-5 merely omit some of the limitations from the claims of the patent. Omission of an element along with its function from a combination is an obvious variant. Limitations omitted from instant claims 1-5 are recited in instant claims 6 and 7.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome

Serial Number: 09/811,261

Art Unit: 1741

by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 6 and 7 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 3, respectively, of prior U.S. Patent No. 6,274,013. This is a double patenting rejection. The wording of instant claims 6 and 7 is virtually identical to claims 1 and 3 of the patent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Leader, whose telephone number is (703) 308-2530. The examiner can normally be reached Mondays-Thursdays and every other Friday from 7:30 AM to 4:00 PM eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached at (703) 308-3322. The fax phone number for official after final faxes is (703) 305-3599. The fax phone number for all other official faxes is (703) 305-7718. Unofficial communications to the Examiner should be faxed to (703) 305-7719.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.

Wh William Leader:wtl May 20, 2002

NAM NGUYEN)
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700